



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Christian Wachter, et al.

Serial No.: 10/620,583

Group Art Unit: 3681

Filed: July 16, 2003

Examiner: Roger L. Pang

For: DIFFERENTIAL DRIVE WITH LIGHTWEIGHT DIFFERENTIAL CARRIER

Attorney Docket No: GKNG 1160 PUS

I hereby certify that this correspondence is being sent via facsimile to: Attn: Examiner Roger L. Pang, Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 fax number (703) 872-9306 on:

March 7, 2005
Date of Deposit

Angie Moscowitz


Signature

AMENDMENT AND REQUEST FOR RECONSIDERATION

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants submit this Amendment and Request for Reconsideration in response to the Final Office Action dated January 7, 2005. This response is timely because it is being filed within two months from the date of the Office Action. Please amend the above-identified application as follows:

BEST AVAILABLE COPY

IN THE CLAIMS:

1. (currently amended) A differential drive comprising:
a drive housing in which a differential carrier (14) is rotatably supported around its longitudinal axis (A);
pre-assembled modules each comprising a sideshaft gear (18, 19), an outer joint part (30, 31) of a constant velocity joint and a rolling contact bearing (12, 13), the module being insertable into the drive housing (11), wherein the sideshaft gears (18, 19) are supported so as to be rotatable around said longitudinal axis (A) relative to the differential carrier (14) and are directly connected to the outer joint parts (30, 31) of the constant velocity joints; and
differential gears (22) which are supported in the differential carrier rotatably around axes (R) extending radially relative to the longitudinal axis (A), said differential gears (22) engaging the sideshaft gears (18, 19) and rotating together with the differential carrier (14),
wherein the differential carrier (14) forms journals (16, 17) which extend co-axially relative to the longitudinal axis (A) and by means of which the differential carrier (14) is rotatably supported in the sideshaft gears (18, 19) and wherein the sideshaft gears (13, 19) (18, 19) are rotatably supported in the drive housing (11), and
wherein the rolling contact bearings (12, 13) are angular contact rolling bearings, and wherein outer bearing races (12_A, 13_A) of the angular contact rolling bearings (12, 13) have an inner diameter greater than the outer diameter of the outer joint parts (30, 31), so as to be axially slipped over the outer joint parts (30, 31).
2. (previously presented) A drive according to claim 1, wherein the sideshaft gears (18, 19) are supported by the rolling contact bearings (12, 13) in the drive housing (11)
3. (original) A drive according to one of claim 1, wherein the regions of tooth engagement between the sideshaft gears (18, 19) and the differential gears (22) are located outside the differential carrier (14)

4. (original) A drive according to claim 1, wherein the journals (16, 17) are coaxial hollow journals integrally connected to one another.

5. (withdrawn) A drive according to claim 1, wherein the differential gears (22) are inserted into axial broken-out regions (41) in a radial disc member (15), said radial disc member forming a ring gear (38) in the differential carrier (14).

6. (original) A drive according to claim 1, wherein the differential gears (22) are inserted into axial broken-out regions (41) in a radial disc member (15), said radial disc member adapted to secure a ring gear (38) in the differential carrier (14).

7. (cancelled)

8. (previously presented) A drive according to claim 1, wherein the rolling contact bearings (12, 13) are axially fitted between the sideshaft gears (18, 19) and the outer joint parts (30, 31).

9. (cancelled)

10. (previously presented) A drive according to claim 1, wherein the sideshaft gears (18, 19) are each welded to one of the outer joint parts (30, 31).

11. (cancelled)

12. (original) A drive according to claim 2, wherein the rolling contact bearings (12, 13) are angular contact roller bearings.

13. (previously presented) A differential drive comprising:
a drive housing in which a differential carrier (14) is rotatably supported around its longitudinal axis (A);
sideshaft gears (18, 19) which are supported so as to be rotatable around said longitudinal axis (A) relative to the differential carrier (14); and

differential gears (22) which are supported in the differential carrier rotatably around axes (R) extending radially relative to the longitudinal axis (A), said differential gears (22) engaging the sideshaft gears (18, 19) and rotating together with the differential carrier (14),

wherein the differential carrier (14) forms journals (16, 17) which extend co-axially relative to the longitudinal axis (A) and by means of which the differential carrier (14) is rotatably supported in the sideshaft gears (18, 19) and wherein the sideshaft gears (13, 19) are rotatably supported in the drive housing (11), and wherein the differential carrier (14) is supported by friction bearings (20, 21) in the sideshaft gears (18, 19)

14. (previously presented) A drive according to claim 2, wherein effective lines (L_{12} , L_{13}) of load of the rolling contact bearings (12, 13) pass through bearing regions of the differential carrier (14) in the sideshaft gears approximately axially centrally.

15. (original) A drive according to claim 13, wherein the friction bearings (20, 21) comprise friction sleeves.

16. (withdrawn) A drive according to claim 13, wherein the friction bearings (20, 21) comprise a plurality of needle bearings.

17. (original) A drive according to claim 1, wherein the journals (16, 17) are hollow.